PART I -SECTION C

STATEMENT OF WORK

This is an indefinite-quantity indefinite-delivery firm-fixed price contract for the acquisition of various types of Radio Frequency cable for the Federal Aviation Administration.

The contractor shall provide:

1. RG-214 Cable, ½ inch Radio Frequency Coaxial Cable, 50 Ohms Nominal Impedance; 30.8 pF/foot capacitance; 10,000 V RMS maximum operating voltage; center conductor is stranded braided copper with silver finish, composed of 7 strands of 0.029 inch copper; dielectric is polyethylene; outer conductor is double-braided, silver-coated copper providing 98% shield coverage; outer cable jacket shall be black synthetic resin; nominal overall cable outside diameter (OD) is 0.425 inches; nominal RF attenuation per 100 ft. shall be 2.1 dB at 100 MHz, 3dB at 200 MHz and 4.8 dB at 400 MHz; non-plenum rated.

    a. N Type Male Connector

    b. N Type Female Connector

    c. N Type Male Right Angle Connector

    d. N Type Female Right Angle Connector

2. 7/8 inch Cable, --Low Loss Foam Coaxial Cable. Outer conductor is annularly corrugated copper, with foam polyethylene dielectric and center conductor is stranded braided copper or copper clad aluminum. Outer jacket is black polyethylene. Electrical characteristics: cable size is 7/8 inch; 50 ohms impedance; nominal RF attenuation per 100 ft. is .20dB at 30:MHz; .78dB at 400 MHz and 1.37 dB at 1,000 MHz. Average power at 30 MHz is 10.5 kW. Relative propagation velocity - 89%. Mechanical characteristics: center conductor OD is 0.357 inch; outer conductor OD is 0.990 inch. Jacket OD is 1.124 inch; minimum bending radius is 10 inches. Cable shall be ordered and shipped in a minimum quantity of 1000 ft. reels.

    a. N Type Male Connector

    b. N Type Female Connector

    c. N Type Male Right Angle Connector

    d. N Type Female Right Angle Connector

3. ½ inch Cable, --Low Loss Foam Coaxial Cable. Outer conductor is annularly corrugated copper, with foam polyethylene dielectric and center conductor is stranded braided copper clad aluminum. Outer jacket is black polyethylene. Electrical characteristics: cable size is 1/2 inch; 50 ohms impedance; nominal RF attenuation per 100 feet is .37 dB at 30 MHz; 1.42 dB at 400 MHz and

2.34 dB at 1,000 MHz. Average power at 30 MHz is 5 kW. Relative propagation velocity -88%. Mechanical characteristics: Center conductor OD is 0.190 inch; outer conductor OD is 0.540 inch. Jacket OD is 0.640 inch; minimum bending radius is 5 inches. Cable shall be ordered and shipped in minimum quantity of 1000 ft. reels.

a. N Type Male Connector

b. N Type Female Connector

c. N Type Male Right Angle Connector

d. N Type Female Right Angle Connector

4. ½ inch Ultra Flex – Low Loss foam coaxial Cable. Electrical characteristics: nominal cable size in ½ inch; 50 ohm impedance; Attenuation per 100 ft. is 0.8 dB at 30 MHz, 3.3 dB at 450 MHz, and 4.7 dB at 900 MHz. Average power is 2.77 kW at 30 MHz. Relative propagation velocity is 81%. Mechanical characteristics: center conductor OD is 0.108 inches; outer conductor OD is 0.291 inches; jacket OD is 0.405 inches. Minimum bend radius is 1.0 inch. Non-plenum. Cable shall be available in 250 ft. reel boxes and 1000 ft. reels.

a. N Type Male Crimp Connector

b. N Type Male Connector

c. N Type Male Right Angle Connector

d. N Type Female Right Angle Connector

5. Each N type connector shall have a nickel plated body with Teflon insulation. The center contact shall be gold plated.

6. The contractor shall provide Bayonet Neill-Concelman (BNC) type connectors as ordered by the Government.

All connectors for the "W" foam cable shall be captivated or compression type connectors (not a solder type).

7. The contractor shall ensure that the cables and connectors are compatible and do not result in any reduction of performance.

8. The contractor shall provide any tools specific to the installation of connectors on to the cables.